

AMENDMENTS TO THE DRAWINGS:

The attached sheet of drawings includes changes to Figure 2. Figure 2 was amended to add, a generic representation, a screw 15.

Attachment: Replacement Sheet

REMARKS

The application has been amended and is believed to be in condition for allowance.

The drawing figures were object to as not illustrating the features of claims 34 and 36.

Claim 34 previously recited means for screwing or nailing into the block at a depth that is equal to at least one third of the thickness of the block. See specification page 2, lines 8-20 disclosing countersunk holes 10, the depth of screwing or nailing screwing/nailing of upper blocks into the lower block is equal to at least one third of the thickness of the lower block. The claim 34 subject matter has been brought into claim 22. The attached sheet of drawings includes changes to Figure 2. Figure 2 was amended to add, a generic representation, a screw 15. No new matter is entered by way of this amendment.

Claim 36 was based on the disclosure of specification page 3, lines 1-2: "The grinding of the flanges is carried out only on the portion covered by assembly (13) when block walls are joined at a right angle and with conventional clamping". This assembly region is illustrated by Figure 2, see the double headed area where the flanges would be ground off, i.e., where the upper face comprises of a region containing the pair of flanges (the part not delimited by assembly region 13) and an end region defined by a portion of the upper face to be covered by joining another block at a right angle at said end region, said end

region being free of said pair of flanges (assembly region 13). Also see the original PCT Abstract. Claim 36 has been amended to clarify the structure that results from the disclosed grinding.

Withdrawal of the drawing objection is solicited.

Claim 36 was rejected under §112, second paragraph, as being indefinite.

As discussed above, claim 36 has been amended consistent with the specification and to clarify the recitation in a structural manner.

Withdrawal of the rejection is solicited.

Claim 22 has also been amended to recite that a diameter of each groove is greater than a diameter of the flange in the same vertical axis. This is supported by specification page 1, the last three lines. Additionally, claim 22 has been amended to recite the upper face comprising an upper bearing surface located within and delimited by adjacent interior edges of the pair of flanges, and the lower face comprising a lower supported surface located within and delimited by adjacent interior edges of the pair of grooves. These areas are illustrated at least on Figure 1.

Claim 32 has been amended to be in independent form, including the inclusion of claim 31.

No new matter is entered by way of these amendments.

Rejections Under 35 USC 103

Claims 22-38 were rejected as obvious over ROLLE 3,343,328 in view of STREY DE 19835241 and MONTANELLI DE 2739017.

This present invention provides a wood block having a structure that advantageously may be used in construction on the same principle and the same method as the traditional masonry block during the construction of a solid wall by staggered stacking. The recited features provide for an assembly process is an ordinary tongue and groove joint with double flanges (1) on its upper face and double grooves (2) on its lower face, each block having a lower supported surface resting on the upper bearing surface of another block. That is, the blocks of a first course of blocks provide an upper bearing surface upon which lower supported surface the blocks of a second course of blocks rest.

The modified combination based on ROLLE does not suggest such a block.

Similarly, amended claim 32 recites specific features of the block not taught by any modified combination base on ROLLE.

The below remarks discuss these differences in more detail.

ROLLE discloses a wood block having some means for its assembly with other blocks. However, the Official Action

acknowledged that the recited invention differs from ROLLE in that:

the invention comprises a pair of grooves and a pair of flanges;
a spline connection; and
a group of two countersunk holes.

Additional differences include:

The countersunk holes of ROLLE are not for insertion of screwing or nailing means. The perforations 180 of ROLLE are only for aeration purpose (see ROLLE, column 9, lines 28 through 31 *"the provision of the perforations 180 allows drying air to pass from any level of the blocks to any other level through the perforations 180, thereby facilitating drying the blocks and providing for an even drying process."*) The air flow of ROLLE is also produced by a clearance between two blocks at the level of the groove (see Figure 15).

In broader terms, ROLLE combines a groove on the lower face cooperating with a projecting portion on the upper face, and perforations 180. This combination provides with an air flow through the wall of blocks but is not at all for the same objective as the invention. Indeed, the grooves and flanges as well as the countersunk holes of claim 22 act as assembly means.

Consequently, applicant does not agree with the Official Action about the relevancy of ROLLE and the obvious association of ROLLE with STREY and MONTANELLI.

First, the present invention is for improving the mechanical resistance of the assembly of blocks. ROLLE fails to suggest that the block it discloses can be improved to reach this objective so that a normally skilled person would not have the idea, in view of ROLLE, to modify this block in order to increase the assembly's strength. And even with the idea of increasing the strength, modifying the block of ROLLE in the way of the invention is not obvious: a normally skilled person would not have suppressed the air flow channels through the block so that he would not have inserted screwing or nailing means in the perforations nor created a large surface of contact between the lower and the upper blocks as the invention does. This would involve a deep modification of ROLLE because the flow of air would be abandoned.

Second, a skilled person would not combine the teachings of ROLLE with STREY and MONTANELLI. Indeed, each of these references discloses particular means for the assembly so that a normally skilled person would have considered these various means as alternative solutions and not as combinable technologies. It is underlined that none of the various references discloses the combination of assembly as claimed. This is a strong indication that the claims are indeed non-obvious.

Third, the association of three references is not easy in the present case. Again, a skilled person who would have

combined ROLLE and MONTANELLI would not have any suggestion to further modify the block to add pairs of grooves and flanges.

In addition, even by associating ROLLE, STREY and MONTANELLI, this association still differs from the invention as now recited.

Providing groups of two holes at each splined tongue and groove joint is not suggested by the prior art, even combined. It is recalled that this improves the strength of the assembly by sharing the stresses on a plurality of holes at various locations on the block.

Besides providing the block with screwing or nailing means for insertion in such groups of holes is not suggested at all.

As to amended claim 32:

It adds that the countersunk holes are accurately located on the block and this particular selection of placement is a further difference over the cited references. Applying the claimed rule for the location of the holes enables optimizing the screwing or nailing sites even for blocks having different lengths. At the same time it surprisingly prevents interferences between the screws of superimposed blocks.

The applicant has not found any suggestion about such a feature in the prior art so that nothing could obviously lead a normally skilled person to this additional characteristic.

As to claims 23 and 24, the section of these dimensions is made because they are optimal values for the strength of the assembly comprising the assembly means of the invention. In too small a block, the holes and the grooves may diminish the strength of the wood. If the blocks are too big, the assembly means as claimed may be insufficient to rigidly fasten the blocks.

As to claim 25, the semicircle shape of the grooves and the flanges differs from the cited priori art. It enables an optimized contact at the level of these surfaces with a soft application of the surface as well as an optimal size of the contact.

Reconsideration and allowance of all the claims are therefore respectfully requested.

The present amendment is believed to be fully responsive to the Official Action. Entry of the amendment and allowance of all the claims is solicited.

The Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any

overpayment to Deposit Account No. 25-0120 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17.

Respectfully submitted,

YOUNG & THOMPSON

/Roland E. Long, Jr./
Roland E. Long, Jr., Reg. No. 41,949
209 Madison Street, Suite 500
Alexandria, VA 22314
Telephone (703) 521-2297
Telefax (703) 685-0573
(703) 979-4709

REL/fb

APPENDIX:

The Appendix includes the following item(s):

- a Replacement Sheet for Figures 1-3 of the drawings